the liquid crystal molecules around said point are directed from said point in the opposite sense to that of said part of the liquid crystal molecules.

36. (New) A liquid crystal display apparatus as described in claim 35, wherein at least one of said substrates has means for forming a boundary of alignment of the liquid crystal domains.

REMARKS

Attached hereto is a marked-up version of the changes made to the claims by the current amendment, captioned "**Version with markings to show changes made.**"

The drawings stand objected to on the basis that the alignment control structure of claim 8 is not shown in the drawings. Applicants respectfully traverse this objection, because Figs. 28-30 show the alignment control structure. *See, also*, page 41, line 31, to page 42, line 12. This feature will be explained further, because it is related not only to claim 8 but to claim 1, as well.

Fig. 28 shows (first) means 56 for forming boundaries of alignment of a first type (I), and (second) means 58 for forming boundaries of alignment of a second type (II). The boundary of alignment of the first type (I) and the boundary of alignment of the second type (II) are summarized in Fig. 30.

The boundary of alignment is called a singular point (see page 41, lines 28 and 34). The singular point is also explained on page 58, lines 23 and 34.

First means 56 is shown as a box in Fig. 28, and the structural feature thereof is not shown. Second means 58 is shown as a slit 30T or 32T and is explained with reference to Fig. 28. Moreover, Figs. 31 to 36 and other figures show the structural feature of the first means 56 and the second means 58. For these reasons, applicants request reconsideration and withdrawal of this objection.

The title has been amended as requested.

Claims 8-10 stand rejected under § 112. Claim 8 has been amended to overcome this rejection without narrowing the scope of the claims, and in a manner consistent with the examiner's interpretation of the rejected claim language. Reconsideration and withdrawal are respectfully requested.

Claims 1-2 and 4 stand rejected under § 102 on the basis of Liu. Applicants respectfully traverse this rejection because the cited reference does not disclose (or suggest) a liquid crystal display in which alignment of the liquid crystal is controlled on the basis of a point.

The prior art discloses an alignment control structure by which alignment of the liquid crystal is controlled on the basis of a surface. In contrast, in the present invention alignment of the liquid crystal is controlled on the basis of a point. For this reason, applicants respectfully request reconsideration and withdrawal of this rejection.

The claims have been further amended to better define the invention. Moreover, amended claim 1 is generic to all of the pending claims, including the nonelected claims (only claims 21-23 have been canceled, without prejudice). Accordingly, allowance of all pending claims is respectfully requested.

For the foregoing reasons, applicants believe that this case is in condition for allowance, which is respectfully requested. The examiner should call applicants' attorney if an interview would expedite prosecution.

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the Claims:

Claims 18-23 were canceled, without prejudice.

Claims 1, 2, 8, 12, 24, 25 were amended and new claims 33-36 were added as follows:

1. (Amended) A liquid crystal display apparatus comprising:

a pair of substrates having electrodes and vertical alignment layers; and

a liquid crystal having a negative anisotropy of dielectric constant and inserted between said pair of substrates;

at least one of said substrates having means for forming at least one boundary of alignment of liquid crystal (LC) domains at a fixed position.

~~alignment control structures arranged in each of said pair of substrates for controlling alignment of the liquid crystal; and~~

~~each of said alignment control structures comprising a plurality of constituent units.~~

2. (Amended) A liquid crystal display apparatus as described in claim 36 ~~1~~, whereine~~haracterized in that~~ said alignment control structure comprises~~comprise~~ linearly arranged structures.

8. (Amended) A liquid crystal display apparatus comprising:

a pair of substrates having electrodes and vertical alignment layers;

a liquid crystal having a negative anisotropy of dielectric constant and inserted between said pair of substrates; and

alignment control structures arranged in each of said pair of substrates for controlling alignment of the liquid crystal; ~~and~~

said alignment control structures of at least one of said substrates having at least one of means for forming a boundary of alignment of a first type in which some liquid crystal molecules around a point are directed to said point, and means for forming a boundary of alignment of a second type in which other~~a part of~~ liquid crystal molecules around the~~a~~ point are directed away from ~~to~~ said point, ~~and~~ the other ~~part of the~~ liquid crystal molecules around said point being~~are~~ directed from said point in the~~are~~ opposite sense to that of said some liquid crystal molecules~~point~~.

12. (Amended) A liquid crystal display apparatus as described in claim 36 comprising:

~~a pair of substrates having electrodes and vertical alignment layers;~~

~~a liquid crystal having a negative anisotropy of dielectric constant and inserted between said pair of said substrates;~~

alignment control structures arranged in each of said pair of substrates for controlling alignment of the liquid crystal;

wherein the alignment control structures of one substrate are shifted from the alignment control structures of the other substrate, as viewed in the direction normal to said one substrate, and each of said one substrate and said other substrate has means for forming a boundary of alignment of the liquid crystal molecules at fixed positions with respect to the alignment control structures of the opposed substrate, upon voltage application.

24. (Amended) A liquid crystal display apparatus as described in claim 34 comprising:

~~a pair of substrates having electrodes and vertical alignment layers;~~

~~a liquid crystal having a negative anisotropy of dielectric constant and inserted between said pair of substrates;~~

linearly arranged structures arranged in each of said pair of substrates for controlling alignment of the liquid crystal;

first means arranged in the linearly arranged structures of one said substrate for forming boundary of alignment of liquid crystal; and

second means arranged on the other substrate at the same position as said first means in the direction in which the linearly arranged structure extends for forming boundary of alignment of liquid crystal.

25. (Amended) A liquid crystal display apparatus as described in claim 34 comprising:

~~a pair of substrates having electrodes and vertical alignment layers;~~

~~a liquid crystal having a negative anisotropy of dielectric constant and inserted between said pair of substrates;~~

linearly arranged structure arranged on each of said pair of substrates for controlling alignment of the liquid crystal;

the linearly arranged structures of said one said substrate being formed in such a manner that the liquid crystal molecules located at least at a first position on said linearly arranged structures are aligned in the first direction parallel to said linearly arranged structures at the time of voltage application;

the alignment control structures of said other substrate being formed in such a manner that the liquid crystal molecules located at least at a second position on said linearly arranged structures are aligned in the second direction parallel to said linearly arranged structures and opposite to the first direction at the time of voltage application; and

said first position and said second position are located on a line extending perpendicular to the linearly arranged structures.

33. (New) A liquid crystal display apparatus as described in claim 1, wherein at least one of said substrates has alignment control structures for LC domains.

34. (New) A liquid crystal display apparatus as described in claim 33, wherein said alignment control structures and means arranged on said substrates comprises a plurality of constituent units, one constituent unit comprising at least a part of said alignment control structure for said LC domains and at least a part of said means for forming a boundary of alignment of the liquid crystal domains.

35. (New) A liquid crystal display apparatus as described in claim 33, wherein said at least one of said substrates has at least one of means for forming a boundary of alignment of a first type in which all liquid crystal molecules around a point are directed to said point, and means for forming a boundary of alignment of a second type in which a part of the liquid crystal molecules around a point are directed to said point and the other part of the liquid crystal molecules around said point are directed from said point in the opposite sense to that of said part of the liquid crystal molecules.

36. (New) A liquid crystal display apparatus as described in claim 35, wherein at least one of said substrates has means for forming a boundary of alignment of the liquid crystal domains.